



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/345,482	07/01/1999	KENICHI UEDA	0557-4723-2X	1303

22850 7590 01/20/2004

OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.  
1940 DUKE STREET  
ALEXANDRIA, VA 22314

EXAMINER

TRAN, DOUGLAS Q

ART UNIT PAPER NUMBER

2624

DATE MAILED: 01/20/2004

13

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/345,482

Applicant(s)

UEDA ET AL.

Examiner

Douglas Q. Tran

Art Unit

2624

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 23 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-51 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-51 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 7-13, 17-20, 37, 42-44, and 47-51 rejected under 35 U.S.C. 103(a) as being unpatentable over Aiello, Jr. et al. (US Patent No. 6,337,745) and Owa et al. (US Patent No. 6,348,971).

As to claim 1, Aiello teaches a printer selecting device (i.e., a server) comprising:

Accepting means (i.e., input receiver) for accepting input information representative of a desired number of printings input (i.e., a print job, col. 2, lines 53-55);

Selecting means (i.e., a controller including a selector) for selecting from a plurality of printers matching with the desired number of printings (i.e., the print job's set-up) (col. 2, lines 30-32; the printer is selected based on the set-up information of the input matching with the set-up printer information);

Data outputting means (i.e., a queue manager) for outputting image data to be printed to the printer selected by the selecting means (col. 2, lines 57-59).

Although Aiello does not teaches a lowest printing cost is selected matching with the desired number of printing, Aiello teaches the operator can select a specific printer for the particular print job (col. 5, lines 47-48). Therefore, the printer having the feature for a lowest printing cost to be selected which is well known in the prior art because the operator can select any printer connected to the server. Furthermore, Owa teaches any

Art Unit: 2624

monochrome printing page is distributed to the monochrome printer (30 in fig. 7 including the monochrome pages are distributed to the monochrome printer 31c in fig. 7, which would be considered as a lowest printing cost of the printer).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of Aiello for selecting the a printer having a lowest printing cost from a plurality of printers matching with the desired number of printing as taught by Owa. The suggestion for modifying the system of Aiello can be reasoned by one of ordinary skill in the art set forth by Owa because such modified printing system of Aiello would control to delivery the print job to the desired printer among the connected printers in the network.

As to claim 7, Aiello teaches that displaying means for causing a display to show the printer selected by the selecting means (col. 8, lines 35-38).

As to claim 8, Aiello teaches that the displaying means displays the printer such that another printer can be substituted for the printer, as desired (col. 9, lines 5-8).

As to claim 9, Aiello teaches that when the stencil printer is selected printer is selected printer is advantageous in printing cost than at least one of the other printers (col. 1, lines 51-52).

As to claim 10, Aiello teaches that the displaying means displays the printer such that another printer can be substituted for the printer, as desired (col. 9, lines 5-8).

As to claim 11, Aiello teaches a printer selecting device (i.e., a server) comprising:

Accepting means (i.e., input receiver) for accepting information representative of a desired number of printings (i.e., a print job, col. 2, lines 53-55);

Art Unit: 2624

Operating and displaying means (i.e., graphical user interface, col. 2, line 24) for displaying on an operation and display section a plurality of printers together with printer by printer additional information indicating at least a printing cost for decision and based on the desired number of printings in such a manner that any one of the plurality of printers can be selected (col. 2, lines 26-34); and

Data outputting means (i.e., a queue manager) for outputting image data to be printed to the printer selected on the operation and display section (col. 2, lines 57-59). Although Aiello does not teaches a lowest printing cost is selected matching with the desired number of printing, Aiello teaches the operator can select a specific printer for the particular print job (col. 5, lines 47-48). Therefore, the printer having the feature for a lowest printing cost to be selected which is well known in the prior art because the operator can select any printer connected to the server. Furthermore, Owa teaches any monochrome printing page is distributed to the monochrome printer (30 in fig. 7 including the monochrome pages are distributed to the monochrome printer 31c in fig. 7, which would be considered as a lowest printing cost of the printer).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of Aiello for selecting the a printer having a lowest printing cost from a plurality of printers matching with the desired number of printing as taught by Owa. The suggestion for modifying the system of Aiello can be reasoned by one of ordinary skill in the art because such modified printing system of Aiello would control to delivery the print job to the desired printer among the connected printers in the network.

Art Unit: 2624

As to claim 12, Aiello teaches that the printer by printer additional information also indicates at least one of printing time, and an image quality level (col. 8, lines 45-55).

As to claim 13, Aiello teaches that

At least one image data supply device (the source computer for outputting image data to be printed (i.e., print jobs, col. 1, line 61);

At least one number setting device (i.e., GUI for setting condition for printing) for setting a desired number of printings (col. 2, lines 26-35);

A plurality of different kinds of printers (62 in fig. 3) each being capable of printing the image data received from the at least one image data supply device; and

a printer selecting device (i.e., a server) comprising accepting means (i.e., input receiver) for accepting input information representative of a desired number of printings input (i.e., a print job, col. 2, lines 53-55); selecting means (i.e., a controller including a selector) for selecting a printer having a lowest print cost from the plurality of printers matching with the desired number of printings (i.e., the print job's set-up) (col. 2, lines 30-32; the printer is selected based on the set-up information of the input matching with the set-up printer information); data outputting means (i.e., a queue manager) for outputting image data to be printed to the printer selected by the selecting means (col. 2, lines 57-59).

Although Aiello does not teaches a lowest printing cost is selected matching with the desired number of printing, Aiello teaches the operator can select a specific printer for the particular print job (col. 5, lines 47-48). Therefore, the printer having the feature for a lowest printing cost to be selected which is well known in the prior art because the

Art Unit: 2624

operator can select any printer connected to the server. Furthermore, Owa teaches any monochrome printing page is distributed to the monochrome printer (30 in fig. 7 including the monochrome pages are distributed to the monochrome printer 31c in fig. 7, which would be considered as a lowest printing cost of the printer).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of Aiello for selecting the a printer having a lowest printing cost from a plurality of printers matching with the desired number of printing as taught by Owa. The suggestion for modifying the system of Aiello can be reasoned by one of ordinary skill in the art because such modified printing system of Aiello would control to delivery the print job to the desired printer among the connected printers in the network.

As to claims 17-19, Aiello teaches that at least one of printers comprises a multiplex processing machine (see 62 and 110 in fig. 3)

As to claim 20, Aiello teaches that the printer selecting device is constructed into an independent unit (i.e., a print server 52 in fig. 5).

As to claims 37, 42-44, 47-49, due to the similarities of these claims to those of claims 1, 11-12, 13, and 17-19, these claims are rejected as reasons applied to claims 1, 11-12, 13, and 17-19.

As to claims 50-51, due to the similarities of these claims to those of claims 3-4, these claims are rejected as reasons applied to claims 3-4.

Art Unit: 2624

3. Claims 2-6, 14-16, 38-41 and 45-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Aiello and Owa, in view of claims 1, and/or 13, and Shibusawa et al. (US Patent No. 6,088,120).

As to claim 2, Aiello and Owa teaches features in claim 1 and Aiello further teaches that when the plurality of printers include a stencil printer, the selecting means selects any type of printers in the network that would include a stencil printer (col. 1, lines 50-52).

However, Aiello does not explicitly teach selecting means selects the stencil printer if the desired number of printing is greater than a preselected reference number inclusive.

Shibusawa, in the same field of endeavor, teaches selecting means selects the physical printer (i.e., stencil printer) if the sum of sets of the attribute information is matched the condition of the table in a server (col. 3, lines 29-54).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the server 52 of Aiello for selecting the stencil printer based on the condition between the input attribute information from the user and the attribute information of the physical printer stored at the table in a server as taught by Shibusawa. The suggestion for modifying the print server of Aiello can be reasoned by one of ordinary skill in the art as set forth by Shibusawa because the server system is more reliable by automatically selecting the one of printers based on the condition information from between the user computer and printers.

As to claim 3, Aiello teaches that displaying means for causing a display to show the printer selected by the selecting means (col. 8, lines 35-38).



Art Unit: 2624

As to claim 4, Aiello teaches that the displaying means displays the printer such that another printer can be substituted for the printer, as desired (col. 9, lines 5-8).

As to claim 5, Aiello teaches that when the stencil printer (i.e., any type of printers) is selected and displayed, the displaying means displays how much the stencil printer is advantageous in printing cost than the other printers (col. 1, lines 51-52).

As to claim 6, Aiello teaches that the displaying means displays the printer such that another printer can be substituted for the printer, as desired (col. 9, lines 5-8).

As to claim 14, Aiello teaches that at least one of the plurality of printers comprises a stencil printer (i.e., any type of printers, col. 1, lines 50-53).

As to claim 15, Aiello teaches that information representative of a printing cost particular to the stencil printer is capable of being freely set in the printer selecting means (col. 1, lines 50-56).

As to claim 16, teaches that the stencil printer is registered at the printer selecting device beforehand as an essential printer, and wherein when the stencil printer is not identified at the time of operation, the printer selecting device outputs a preselected message meant for an operator (col. 2, lines 25-34).

As to claims 38-41, 45-46 due to the similarities of these claims to those of claims 2-6, 14, 16 these claims are rejected as the reasons applied to claims 2-6, 14, 16.

4. Claims 21-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Aiello and Owa and Shibusawa et al. (US Patent No. 6,088,120).

As to claim 21, Aiello teaches a printing system comprising:

Art Unit: 2624

At least one image data supply device (the source computer for outputting image data to be printed (i.e., print jobs, col. 1, line 61);

At least one number setting device (i.e., GUI for setting condition for printing) for setting a desired number of printings (col. 2, lines 26-35);

A plurality of different kinds of printers (62 in fig. 3) each being capable of printing the image data received from the at least one image data supply device; and a printer selecting device (i.e., a server) comprising accepting means (i.e., input receiver) for accepting information representative of a desired number of printings input (i.e., a print job, col. 2, lines 53-55); selecting means (i.e., a controller including a selector) for selecting an adequate one of a plurality of printers matching with the desired number of printings (i.e., the print job's set-up) (col. 2, lines 30-32; the printer is selected based on the set-up information of the input matching with the set-up printer information); data outputting means (i.e., a queue manager) for outputting image data to be printed to the printer selected by the selecting means (col. 2, lines 57-59).

Furthermore, Owa teaches any monochrome printing page is distributed to the monochrome printer (30 in fig. 7 including the monochrome pages are distributed to the monochrome printer 31c in fig. 7, which would be considered as a lowest printing cost of the printer).

However, Aiello and Owa does not explicitly teach selecting means selects the stencil printer if the desired number of printing is greater than a preselected reference number inclusive.

Art Unit: 2624

Shibusawa, in the same field of endeavor, teaches selecting means selects the physical printer (i.e., stencil printer) if the sum of sets of the attribute information is matched the condition of the table in a server (col. 3, lines 29-54).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the server 52 of Aiello and Owa for selecting the stencil printer based on the condition between the input attribute information from the user and the attribute information of the physical printer stored at the table in a server as taught by Shibusawa. The suggestion for modifying the print server of Aiello and Owa can be reasoned by one of ordinary skill in the art as set forth by Shibusawa because the server system is more reliable by automatically selecting the one of printers based on the condition information from between the user computer and printers.

As to claims 22-24, due to these claims to those of claims 14-16, these claims are rejected as the reasons to claims 14-16.

As to claims 25-27, Aiello teaches that at least one of printers comprises a multiplex processing machine (see 62 and 110 in fig. 3)

As to claim 28, Aiello teaches that the printer selecting device is constructed into an independent unit (i.e., a print server 52 in fig. 5).

As to claim 29, Aiello teaches a printing system comprising:

At least one image data supply device (the source computer for outputting image data to be printed (i.e., print jobs, col. 1, line 61);

At least one number setting device (i.e., GUI for setting condition for printing) for setting a desired number of printings (col. 2, lines 26-35);

Art Unit: 2624

A plurality of different kinds of printers (62 in fig. 3) each being capable of printing the image data received from the at least one image data supply device; and a printer selecting device (i.e., a server) comprising accepting means (i.e., input receiver) for accepting information representative of a desired number of printings input (i.e., a print job, col. 2, lines 53-55); selecting means (i.e., a controller including a selector) for selecting an adequate one of a plurality of printers matching with the desired number of printings (i.e., the print job's set-up) (col. 2, lines 30-32; the printer is selected based on the set-up information of the input matching with the set-up printer information); data outputting means (i.e., a queue manager) for outputting image data to be printed to the printer selected by the selecting means (col. 2, lines 57-59).

However, Aiello does not explicitly teach selecting means selects the stencil printer if the desired number of printing is greater than a preselected reference number inclusive.

Shibusawa, in the same field of endeavor, teaches selecting means selects the physical printer (i.e., stencil printer) if the sum of sets of the attribute information is matched the condition of the table in a server (col. 3, lines 29-54).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the server 52 of Aiello for selecting the stencil printer based on the condition between the input attribute information from the user and the attribute information of the physical printer stored at the table in a server as taught by Shibusawa. The suggestion for modifying the print server of Aiello can be reasoned by one of ordinary skill in the art as set forth by Shibusawa because the server system is

Art Unit: 2624

more reliable by automatically selecting the one of printers based on the condition information from between the user computer and printers.

As to claims 30-36, due to the similarities of these claims to those of claims 22-28, these claims are rejected as the reasons to claims 22-28.

***Response to Arguments and Amendment***

Applicant's arguments with respect to claims 1-51 have been considered but are moot in view of the new ground(s) of rejection. This action is made **non-final**.

Applicant asserted that independent Claims 1, 11 and 13 and each of the claims depending therefrom patentably define over Aiello. However, Aiello is modified by Owa for the lowest cost of the printer. And also, Aiello discloses accepting means (i.e., input receiver) for accepting input information representative of a desired number of printings input (i.e., a print job, col. 2, lines 53-55); Selecting means (i.e., a controller including a selector) for selecting from a plurality of printers matching with the desired number of printings (i.e., the print job's set-up) (col. 2, lines 30-32; the printer is selected based on the set-up information of the input matching with the set-up printer information); Data outputting means (i.e., a queue manager) for outputting image data to be printed to the printer selected by the selecting means (col. 2, lines 57-59). Although Aiello does not teaches a lowest printing cost is selected matching with the desired number of printing, Aiello teaches the operator can select a specific printer for the particular print job (col. 5, lines 47-48). Therefore, the printer having the feature for a lowest printing cost to be selected which is well known in the prior art because the operator can select any printer connected to the server.

Art Unit: 2624

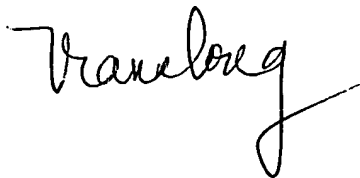
For the above reasons, it is believed that the cited prior art fully discloses the claimed invention and the rejection stand.

*Contact Information*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Douglas Q. Tran whose telephone number is (703) 305-4857 or E-mail address is Douglas.tran@uspto.gov.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-4700.

Douglas Q. Tran  
Jan. 08, 2004

A handwritten signature in black ink, appearing to read "Tran Douglas", with a long horizontal stroke extending to the right.